Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-4.   (Canceled)

5.   (Currently Amended) An apparatus for evaluating the deterioration condition of a catalyst provided in an exhaust system of an internal combustion engine, the apparatus comprising:

a catalyst downstream oxygen concentration detector that detects an oxygen concentration of exhaust gas downstream of the catalyst; and

a controller that determines that an air/fuel ratio of exhaust gas downstream of the catalyst is in fuel rich condition when a detected value of the catalyst downstream oxygen concentration detector is more than a first value, determines that the air/fuel ratio of exhaust gas downstream of the catalyst is in fuel lean condition when a detected value of the catalyst downstream oxygen concentration detector is less than a second value, and controls the internal combustion engine to change an air/fuel ratio of exhaust gas upstream of the catalyst when an integrated value becomes a third value, the integrated value being integrated until a second timing after the integrated value is reset at a first timing, the second timing being determined based on a determination result of the air/fuel ratio of exhaust gas downstream of the ~~catalyst.~~ catalyst,

wherein the first timing is when the determination result of the air/fuel ratio is changed, and the second timing is when the determination result of the air/fuel ratio is subsequently changed, and

wherein the integrated value indicates an integrated value of an intake air volume of the internal combustion engine.

6-7.   (Canceled)

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8.   (Currently Amended) The apparatus according to ~~claim 7,~~ claim 5, wherein the integrated value of the intake air volume is changed for each load region of the internal combustion engine.

9.   (Currently Amended) The apparatus according to ~~claim 6,~~ claim 5, wherein the integrated value is a time factor, and the third value is a predetermined time period.

10.   (Currently Amended) An ~~The~~ apparatus ~~according to claim 5,~~ for evaluating the deterioration condition of a catalyst provided in an exhaust system of an internal combustion engine, the apparatus comprising:

        a catalyst downstream oxygen concentration detector that detects an oxygen concentration of exhaust gas downstream of the catalyst;

        a controller that determines that an air/fuel ratio of exhaust gas downstream of the catalyst is in fuel rich condition when a detected value of the catalyst downstream oxygen concentration detector is more than a first value, determines that the air/fuel ratio of exhaust gas downstream of the catalyst is in fuel lean condition when a detected value of the catalyst downstream oxygen concentration detector is less than a second value, and controls the internal combustion engine to change an air/fuel ratio of exhaust gas upstream of the catalyst when an integrated value becomes a third value, the integrated value being integrated until a second timing after the integrated value is reset at a first timing, the second timing being determined based on a determination result of the air/fuel ratio of exhaust gas downstream of the catalyst; and ~~further comprising~~

        a catalyst upstream air/fuel ratio detector that detects the air/fuel ratio of exhaust gas upstream of the catalyst,

        wherein the first timing is when the air/fuel ratio detected by the catalyst upstream air/fuel ratio detector is changed from fuel lean condition to fuel rich condition, and the second timing is when the air/fuel ratio subsequently detected by the catalyst upstream

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air/fuel ratio detector is in fuel lean condition and the air/fuel ratio of exhaust gas downstream of the catalyst is determined to be in fuel rich condition.

11.   (Previously Presented) The apparatus according to claim 10, wherein the integrated value is integrated by a value calculated based on a difference between a current air/fuel ratio and an air/fuel ratio during stoichiometric control and a weight ratio of a current injected fuel volume to current oxygen every integration.